

REMARKS

Claims 1, 7, 12, 13, 15, 24, 15, 37, 43, 46, 47 and 51 have been amended to clarify the invention and to respond to Examiner's requisitions.

Claims 41, 42, 44, 45, 48, 49 and 50 have been canceled without prejudice.

New claims 52 to 56 have been added.

RE: Information Disclosure Statement

The Information Disclosure Statement dated 06/04/01 is re-submitted herewith, including copies of cited references as requested by the Examiner.

RE: Claim Rejections 35 USC §101

The Examiner has rejected claim 12, 24 and 44 as being directed to non-statutory subject matter.

Accordingly, claims 12 and 24 have been re-written to avoid this rejection. Claim 44 has been canceled.

Thus, the rejections under 35 USC §101 have been overcome.

RE: Claim Rejections 35 USC §112

The Examiner has rejected claims 7, 13, 21, 37 as being indefinite, and claims 42 and 45 as not having sufficient antecedent basis.

Accordingly, claims 7, 13 and 37 have been amended to correct certain typos, and to avoid indefinite language. Claim 21 seems to be in good shape. Claims 42 and 45 have been canceled.

Thus, the rejections under 35 USC §112 have been overcome.

RE: Claim Rejections 35 USC §102(e)

The Examiner has rejected claims 1,2,5,7-16, 19, 21-27 and 37-51 as being anticipated by RIVETTE.

The Examiner attention is drawn to the amended claim 1, which clarifies the invention in more detail.

RIVETTE mentions claim trees in general and is particularly concerned with hyperbolic trees for visualizing claim dependency. The hyperbolic tree is a graph, which uses a non-linear focus technique which represents a controllable distortion of the graphical information on the computer screen (referred to as "fish-eye" view). This technique allows to display the most important data at the focal point at full size, and the peripheral area around the focal point at an increasingly smaller size, thus trying to fit as much information as possible within a dedicated area on a computer screen due to the use of a variable scale.

Unfortunately, higher density of information on the computer screen in RIVETTE comes at a heavy price, namely:

the readability of the peripheral information quickly deteriorates because of the increasingly smaller scale, up to the point of the information becoming completely unreadable. This defeats the purpose of putting more information on the screen since only easily readable part of the information is likely to attract attention of a user;

bringing peripheral information into the main focus area to improve readability requires two-dimensional maneuvering by a user, which is more difficult than one-dimensional scrolling; and

there is a limited space left on a computer screen, if at all, for displaying additional information such as text of claims.

Therefore all preferred embodiments described in RIVETTE illustrate claim tree graph and text of claims shown in separate windows and not together in the same window (please see, e.g. Figures 171 and 172). Switching between windows, or resizing the windows, becomes annoying quickly and distracts a user from a main task, which is a patent claim analysis, and thus puts an unduly burden on the user.

And last, but not least, variability of the scale requires substantially more computationally intensive and time consuming information processing for preparation and displaying the hyperbolic tree of RIVETTE on a computer screen. This quickly becomes a problem when large number of documents, e.g. hundreds or thousands of patents, must be processed in a short period of time. For example, in the client-server architecture, when a single server has to quasi-simultaneously respond to the multiple client requests, any increase in the request processing time is highly undesirable because it results in slower server response to a client request, or in smaller number of clients served in any given period of time.

Please note that no effort has been made in RIVETTE to simplify the processing and minimize time that is required for claim tree preparation and displaying, and no effort has been made in RIVETTE to provide a meaningful and comprehensive simultaneous displaying of both claim tree and text of claims.

In contrast, our invention does not deal with hyperbolic trees at all, and our processing and displaying of data is completely different from RIVETTE.

The present invention of the amended claim 1 is concerned with how to provide as simple as possible processing, preparation and displaying of claim tree information.

To achieve this goal, the amended claim 1 includes a particular way of transforming the claim section for the purpose of preparing the claims for a substantially linear displaying, namely:

- (i) transforming multiple dependent claims into single dependent claims;
- (ii) sorting the transformed claims by claim numbers to which the claims refer to;
and
- (iii) interchanging positions of any two neighboring sorted claims, the preceding claim and the succeeding claim, if they meet the following requirements:
 - both claims are dependent claims and refer to different claims; and
 - succeeding claim does not refer to the preceding claim.

The Examiners attention is specifically drawn to the steps (ii) and (iii) of sorting and interchanging, which provide a particular re-arrangement of claims that is not present in RIVETTE as described in paragraphs [0053-0057] of the detailed description of the present invention.

The above noted steps of processing the claim section form a particularly simple and efficient method, which minimizes the processing time and guarantees the correct results for transforming, sorting, and interchanging claims in preparation for a substantially linear

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displaying. In particular, the Applicant has proved a Theorem described in paragraphs [55-57] of the detailed description, on which this method of processing relies.

Additionally, the displaying of the processed claims performed in the current invention is also different from RIVETTE. It is not based on a variable scale technique of hyperbolic trees, having a focus area of a larger size and a peripheral area of an increasingly smaller size, instead it is rather done in a substantially linear manner without changing the relative size of the various elements as it is done in hyperbolic trees.

Yet another feature of the present invention is described in claims 53 and 54, wherein the above noted claim transformation of the amended claim 1 automatically translates into a graphical position of elements on a screen through the use of triplets including vertical and horizontal offsets that are directly defined by the order of interchanged claims and their respective levels of dependency. No new matter has been added, the support for these claims is shown in the specification in paragraphs [0052]-[0061].

Yet additionally as described, e.g. in claim 52, the processed claims are displayed in an interactive manner, namely in the manner allowing a user interactive selection of a subset of elements in one of the graphical and textual forms, and displaying said subset in the selected form along with the related subset of elements according to the transformed claim dependency in the other form to a user, the elements in the graphical form being displayed in the order obtained after the step of interchanging. Accordingly, the transformed claim dependency and text of claims have been converted into respective graphical and textual elements, and a computer program has been associated therewith to provide such interactive displaying.

Clearly RIVETTE does not provide the above noted features, and the Examiner's rejections under 35 USC §102(e) over RIVETTE have been overcome.

Other independent claims 12, 15, 24, 25 and 51 have a scope similar to that of the amended claim 1 or narrower, and therefore should be allowed.


Other dependent claims depend on the amended independent claims 1, 12, 15, 24, 25 and 51 and introduce further limitations, and therefore should be allowed.

The Examiner is requested to respectfully reconsider this application with regard to the amendments to the claims presented above and with a view to considering the claims favorably for allowance.

Yours truly,
Williams, Allan et al

By: 
Victoria Donnelly
Patent Agent Reg. No. 44,185

c/o Victoria Donnelly
PO Box 24001, Hazeldean RPO
Kanata, ON, Canada K2M 2C3
Telephone: (613) 831-6003
Fax: (613) 831-3329
e-mail: vdonnelly@ip-mex.com

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I hereby certify that this correspondence is being faxed to the
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Victoria Donnelly (Name of Patent Agent)
October 25, 2005 (Date of Signature)